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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/765,858 | 01/29/2004 | Naoyuki Nagafuchi | | 2619 |
| 7590 | 03/22/2005 | | EXAMINER | |
| MATTINGLY, STANGER & MALUR Suite 370 1800 Diagonal Rd. Alexandria, VA 22314 | | | SHECHTMAN, SEAN P | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2125 | |

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/765,858 | NAGAFUCHI ET AL. | |
| | Examiner | Art Unit | |
| | Sean P. Shechtman | 2125 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 26 April 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 8 and 12 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 8 and 12 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 19 January 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. 09/791,703.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 1/19/04; 4/26/04.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____ .
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____ .

DETAILED ACTION

1. Claims 8 and 12 are presented for examination.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/791,703, filed on February 26th 2001.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 12 recites the limitation "the facilities" in lines 5-7. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 8 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pub. No. 2002/0035497 to Mazereeuw (supplied by applicant).

Referring to claim 8, Mazereeuw teaches a method of maintaining and managing a plurality of power supplying facilities which supply power to arbitrary power systems (Fig. 1, elements 106 and 128; Page 1, paragraph 0002, 0003, and 0010; Page 3, paragraph 0024; Page 5, paragraph 0039), comprising the steps of:

receiving information of a failure which has occurred in at least one of said power supplying facilities, through communication means (Page 3 - Page 4, paragraph 0028),

selecting a repairing period and procedure for said failure, from repairing periods and procedures which are predetermined according to levels of failures (Page 4, paragraph 0029-0034; The fault conditions are described in levels as service warnings, emergency warnings, and no warning), and

outputting an instruction to control the operation of at least one of the power supplying facilities other than the power supplying facility in which said failure has occurred according to the selected repairing period and procedure (Page 5, paragraphs 0036 and 0039).

Referring to claim 12, Mazereeuw teaches an obtaining failure information of a power supplying facility which has a failure from an error supervision/diagnosis means (Page 4, paragraph 0033; see page 3, paragraphs 0021-0024 for description of supervisory control and data acquisition, i.e. "SCADA". The monitoring system may be directly equipped with the SCADA, page 3, paragraph 0024),

comparing actual operation data of said power supplying facilities by normal and abnormal operation data which was stored in a database in advance (Fig. 1, element 128; Page 3,

paragraph 0024 and 0028; Page 4, paragraph 0029, 0032, and 0034; Page 5, paragraph 0039, the expertise database may be a passive or an interactive database of fault events, symptoms, and solutions), checking for any operation error by an error supervision/diagnosis means (Page 3 – Page 4, paragraph 0028; i.e., the servers query the substation to determine when a fault is detected), outputting failure information from said error supervision/diagnosis means when finding an operation error (Page 4, paragraph 0030; The servers notify appropriate personnel), determining the level of said failure by a fault level judge from said output failure information (Page 4, paragraphs 0031 and 0032; The server automatically calls up appropriate information from the equipment database that relates to the particular fault condition), and showing a predetermined repairing period and procedure according to the determined fault level (Page 4, paragraph 0030).

Although the invention of Mazereeuw teaches monitoring a utility substation rather than a utility generator, a utility substation and a utility generator are considered to be functionally equivalent and are further considered to be intended use. It has been held that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). In this case, the structure of Mazereeuw is capable of monitoring a utility generator.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,754,003 to Thomson (supplied by applicant) in view of U.S. Pat. No. 6,615,367 to Unkle (supplied by applicant).

Referring to claims 8 and 12, Thomson teaches a method of maintaining and managing a plurality of power generating facilities which supply power to arbitrary power systems (Fig. 1 above; Col. 4, line 33 – Col. 5, line 13), comprising the steps of:

controlling the operation of at least one of power generating facilities except the power generating facility which has the failure (Col. 4, lines 46-64; Col. 5, lines 7-14);
wherein a control facility performs maintenance and management of power generating facilities (Col. 4, line 33 – Col. 5, line 13) which have failures (Col. 3, lines 1-18).

Thomson teaches all of the limitations set forth above, however, Thomson fails to teach a operational database, selecting a repairing period and procedure for the failure which occurred from repairing periods and procedures which are predetermined according to levels of failures, and showing the selected or predetermined repairing period and procedure according to the determined fault level.

However, Unkle teaches analogous art, i.e., a maintenance and repair system for power generating machines, comprising:

Referring to claims 8 and 12, Unkle discloses an operation control system (Col. 1, lines 17-20 of '367) for controlling a plurality of power generating facilities (Col. 1, lines 15-20; Col. 12, lines 18-19 of '367), comprising means for gradually weighting the levels of failures (Col. 11, lines 16-34 of '367) of said power generating facilities according to operating status information of each of said power generating facilities (Col. 12, lines 18-19; Col. 7, lines 4-18 of '367) and means for outputting preset information which shows a repairing period (Fig. 2, element 34 of '367) and a repairing procedure (Fig. 2, elements 36-37 of '367) corresponding to each weighted failure level (Fig. 2, element 34; Col. 6, lines 19-46; Col. 11, lines 16-34 of '367).

Referring to claim 12, Unkle discloses an operation and management system for power generating facilities comprising:

a database storing operation data obtained while the facilities are in normal operating states and operation data obtained while the facilities are in abnormal states, an error supervision/diagnosis means which compares actual operation data of said power supplying facilities by operation data stored in said database, checks for any operation error (Col. 1, line 26 – Col. 2, line 6 of '367),

and outputs failure information when finding an operation error (Fig. 2 of '367), a fault level judge which determines the level of said failure from said output failure information (Col. 11, lines 16-34 of '367), operation scheduling means which shows a predetermined repairing period and procedure selected according to the determined failure level (Fig. 2 of '367).

Therefore, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the teachings of Thomson to include the specific maintenance diagnosis and repair scheduling means of Unkle, i.e., with diagnosis based on specific levels of failures that are weighted according to secular and operation changes and with displaying of the repairing period and procedure.

One of ordinary skill in the art would have been motivated to combine these references because Unkle teaches a system and method that improves diagnostic accuracy for failure conditions (Col. 1, lines 9-14 of '367) wherein a knowledge processor can quickly find information in the rule or knowledge base to evaluate the operation of a malfunctioning machine and provide guidance to the field engineer (Col. 1, lines 49-64 of '367). Furthermore, Unkle teaches a system that is more likely to identify a specific cause of a fault when fault log information and operational parameters are received (Col. 5, lines 24-32 of '367).

Conclusion

6. The prior art or art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents or publications are cited to further show the state of the art with respect to centralized control over plural power stations, such as power supply stations and power generating stations.

U.S. Pat. No. 4,785,405 to Hasegawa.

The following patents or publications are cited to further show the state of the art with respect to a maintenance management system.

U.S. Pat. No. 6,006,171 to Vines.

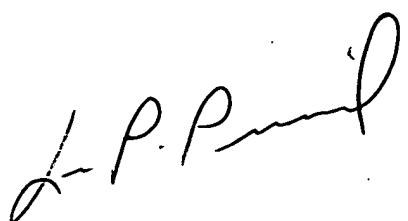
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean P. Shechtman whose telephone number is (571) 272-3754. The examiner can normally be reached on 9:30am-6:00pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sean P. Shechtman

March 20, 2005



LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100